

REMARKS

Claim Rejections 35 U.S.C. § 102 (e)

The Examiner has rejected claims 1-15 under 35 U.S.C. §102 (e) as being anticipated by Gau et al. (US 6,361,909).

Claims 1-5

Applicant respectfully disagrees with the Examiner. Claim 1 of Applicant's claimed invention, as amended, claims an apparatus (710) comprising: an opaque plate (712); a central opening (725) disposed in said opaque plate; and at least one peripheral opening disposed away from said central opening in said opaque plate wherein said at least one peripheral opening comprises at least one annular opening (715). See lines 9-10 on page 7 of the specification and Figure 3 (a).

An annular opening is a ring-shaped opening located concentrically around a central opening. Applicant wishes to point out to the Examiner that the apparatus of the cited reference Gau et al. does not include an annular opening. See Figure 9.

Since the Gau et al. reference cited by the Examiner fails to teach each and every element of claim 1 of Applicant's claimed invention, claim 1 of Applicant's claimed invention is not anticipated by Gau et al. Claims 2 and 5 are dependent on claim 1 and are, thus, also not anticipated by Gau et al. Applicant has cancelled claims 3-4 without prejudice.

Claims 6-10

Applicant respectfully disagrees with the Examiner. Claim 6 of Applicant's claimed invention, as amended, claims an apparatus comprising: a source of light; optical elements; and an aperture (810, 1010), said aperture comprising: an opaque plate (812, 1012); a central opening (825, 1025) disposed in said opaque plate; and at least one peripheral opening (815, 1015) disposed away from said central opening in said opaque plate wherein a filter may reduce intensity of said light passing through said at least one peripheral opening with respect to said light passing through said central opening. See lines 17-20 on page 7 of the specification and Figure 3 (b). Also, see lines 3-5 on page 8 of the specification and Figure 4 (b).

Applicant wishes to point out to the Examiner that the apparatus of the cited reference Gau et al. does not include a filter to reduce intensity of light passing through a peripheral opening with respect to light passing through a central opening. See Figure 9.

Since the Gau et al. reference cited by the Examiner fails to teach each and every element of claim 6 of Applicant's claimed invention, claim 6 of Applicant's claimed invention is not anticipated by Gau et al. Claims 7-9 are dependent on claim 6 and are, thus, also not anticipated by Gau et al. Applicant has cancelled claim 10 without prejudice.

Claims 11-15

Applicant respectfully disagrees with the Examiner. Claim 11 of Applicant's claimed invention, as amended, claims a method comprising: providing an illumination beam; forming an on-axis component of said illumination beam; forming at least one off-axis component of said illumination beam wherein said at least one off-axis component of said illumination beam is annular; and combining said on-axis component and said at least one off-axis component into an exposure beam. See lines 10 and 18 on page 7 of the specification and Figures 3 (a) and 3 (b).

Applicant wishes to point out to the Examiner that the method of the cited reference Gau et al. does not include forming an illumination beam with an off-axis component that is annular.

Since the Gau et al. reference cited by the Examiner fails to teach each and every element of claim 11 of Applicant's claimed invention, claim 11 of Applicant's claimed invention is not anticipated by Gau et al. Claims 14-15 are dependent on claim 11 and are, thus, also not anticipated by Gau et al. Applicant has cancelled claims 12-13 without prejudice.

In view of the foregoing, Applicant respectfully requests the Examiner to withdraw the rejections to claims 1-2, 5-9, 11-12, and 14-15 under 35 U.S.C. §102 (e).

Claim Rejections 35 U.S.C. § 102 (b)

The Examiner has rejected claims 1-4 and 6-9 under 35 U.S.C. §102 (b) as being anticipated by Elwood (US 593,993).

Claims 1-4

Applicant respectfully disagrees with the Examiner. Claim 1 of Applicant's claimed invention, as amended, claims an apparatus (810) comprising: an opaque plate (812); a central opening (825) disposed in said opaque plate; and at least one peripheral opening disposed away from said central opening in said opaque plate wherein said at least one peripheral opening comprises at least one annular opening (815). See lines 9-10 on page 7 of the specification and Figure 3 (b).

An annular opening is a ring-shaped opening located concentrically around a central opening. Applicant wishes to point out to the Examiner that the apparatus of the cited reference Elwood does not include an annular opening. See Figure 3.

Since the Elwood reference cited by the Examiner fails to teach each and every element of claim 1 of Applicant's claimed invention, claim 1 of Applicant's claimed invention is not anticipated by Elwood. Claim 2 is dependent on claim 1 and is, thus, also not anticipated by Elwood. Applicant has cancelled claims 3-4 without prejudice.

Claims 6-9

Applicant respectfully disagrees with the Examiner. Claim 6 of Applicant's claimed invention, as amended, claims an apparatus comprising: a source of light; optical elements; and an aperture (810, 1010), said aperture comprising: an opaque plate (812, 1012); a central opening (825, 1025) disposed in said opaque plate; and at least one peripheral opening (815, 1015) disposed away from said central opening in said opaque plate wherein a filter may reduce intensity of said light passing through said at least one peripheral opening with respect to said light passing through said central opening. See lines 17-20 on page 7 of the specification and Figure 3 (b). Also, see lines 3-5 on page 8 of the specification and Figure 4 (b).

Applicant wishes to point out to the Examiner that the apparatus of the cited reference Elwood does not include a filter to reduce intensity of light passing through a peripheral opening with respect to light passing through a central opening. See Figure 3.

Since the Elwood reference cited by the Examiner fails to teach each and every element of claim 6 of Applicant's claimed invention, claim 6 of Applicant's claimed invention is not anticipated by Elwood. Claims 7-9 are dependent on claim 6 and are, thus, also not anticipated by Elwood.

In view of the foregoing, Applicant respectfully requests the Examiner to withdraw the rejections to claims 1-2 and 6-9 under 35 U.S.C. §102 (b).

Conclusion

Applicant believes that all claims pending, including claims 1-15, are now in condition for allowance so such action is earnestly solicited at the earliest possible date.